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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.		
09/954,596	09/12/2001	Anton Gunzinger	FREI P033US-2	P033US-2 8857	
21121	7590 07/03/2002				
	AND LARSON LLF	•	ELLIS, RICHARD L		
P O BOX 506 DILLON, CO	8 80435-5068				
			ART UNIT	PAPER NUMBER	
			2183		
			DATE MAILED: 07/03/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)		· · · •
Office Action Summary	09/954,596	Gunzinger,		
Office Action Summary	Examiner		Group Art Unit	
	Richard Ellis		2183	
The MAILING DATE of this communication appears	on the cover she	eet beneath the co	rrespondence addres	s-
Period for Response				
A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET MAILING DATE OF THIS COMMUNICATION.	TO EXPIRE 3 (T	<u>'hree)</u> MO	NTH(S) FROM THE	
 Extensions of time may be available under the provisions of 37 CFR 1.13 from the mailing date of this communication. If the period for response specified above is less than thirty (30) days, a real If NO period for response is specified above, such period shall, by default Failure to respond within the set or extended period for response will, by second second	esponse within the start, expire SIX (6) MONT	tutory minimum of thirt 'HS from the mailing d	y (30) days will be consider ate of this communication.	ed timely.
Status				
Responsive to communication(s) filed on Jan. 23, 2002.				•
This action is FINAL				
☐ Since this application is in condition for allowance except f		•	the merits is closed in	
accordance with the practice under Ex parte Quayle, 1935	6 C.D. 11; 453 O.G	i. 213.		
Disposition of Claims				
☑ Claim(s) 16-25.		is/are pendi	ng in the application.	
Of the above claim(s)		is/are withd	rawn from consideratio	n.
Claim(s)		is/are allow	ed.	
☑ Claim(s) 16-25.		is/are reject	ed.	
Claim(s)		is/are objec	ted to.	
Claim(s)		are subject		n
Application Papers		roquirement		
See the attached Notice of Draftsperson's Patent Drawing	Review PTO-948	.		
☐ The proposed drawing correction, filed on			ed.	
☐ The drawing(s) filed on is/are object		• •		
The specification is objected to by the Examiner.				
☐ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. § 119(a)-(d)				
Acknowledgement is made of a claim for foreign priority ur	nder 35 U.S.C. § 1	19(a)-(d).		
☐ All ☐ Some* ☐ None of the CERTIFIED copies of	_			
received				
received in Application No. (Series Code/Serial Number	•			
received in this national stage application from the Inte	-			
*Certified copies not received:			·	
Attachment(s)				
☑ Information Disclosure Statement(s), PTO-1449, Paper No.	o(s). <u>3, 5.</u>	☐ Interview Sum	mary, PTO-413	
Notice of References Cited, PTO-892	<u>-</u>		mal Patent Application	, PTO-152
☐ Notice of Draftsperson's Patent drawing Review, PTO-948	3	Other		
Office Ac	ction Summary			

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- 1. Claims 16-25 are presented for examination.
- 2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.
- 3. Claims 16-20 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - A) The scope of meaning of the following terms are unclear:
 - "each communications manager comprising predefined values" claims 16 and 21. It is unclear how a piece of hardware, i.e., the "communications manager" can comprise (i.e., be made up on, be created from) "predefined values". A communications manager can contain or can be assigned a predefined value, but it can not itself be "comprised" of those predefined values.
- 4. The following is a quotation of the appropriate paragraphs of 35 USC § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. The following is a quotation of the appropriate paragraphs of 35 USC § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 USC § 103, the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of potential 35 USC § 102(f) or (g) prior art under 35 USC § 103.
- 7. The following is a quotation of 35 USC § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

8. Claims 16-25 are rejected under 35 USC 102(b) as being clearly anticipated by

Brantley, Jr. et al., U.S. Patent 4,980,822.

Brantley, Jr. et al. taught (e.g. see figs. 1-8) the invention as claimed (as per claim 16), including a data processing ("DP") system comprising:

- A) a method of operating a parallel computer system (fig. 1) having at least first and second processor elements (20), each processor element comprising a processor (fig. 2, 22), a local program memory (26, 30), a local data memory (26, 30), a communications manager (24, 28), and an operating system (inherent), within each processor element the local program memory, local data memory, and communications manager all communicatively coupled by means of a common bus (fig. 8); the communications managers of the t least first and second processor elements communicative coupled by means of a message-passing communications network (fig. 1, 10); the processor elements each executing an application (inherent); each communications manager further having predefined values indicative of global addresses in which the application of the processor element is interested (fig. 7, "NODE #"); the method comprising the steps of;
- B) writing, by the processor of the first processor element, by means of the common bus of the first processor element, a result of a computation into the communications manager of the first processor element (col. 4 lines 56-60);
- C) adding, by the communications manager, a global address to the result of the computation (fig. 7, "NODE #");
- D) propagating, on the message-passing communications network (fig. 1, 10), a message comprising the global address and the result of the computation (col. 8 lines 36-39, lines 47-68, col. 9 lines 31-37 and 55-60);
- E) receiving the message, via the message-passing communications network (fig. 1, 10), by the communications manager of the second processor element (col. 9 lines 45-54);
- F) comparing, by the communications manager of the second processor element, the global address with the predefined values for a match (col. 9 lines 22-25, 45-54); and,

- G) in the event of a match, computing a local address by the communications manager of the second processor element, and storing the results of the computation at the local address via the common bus to the local data memory (col. 9 lines 45-49, 51-54, and 65-68).
- 9. As to claim 17, Brantley, Jr. et al. taught that the predefined values were further characterized as comprising an address window, each window comprising an initial address and an end address, a match comprising the global address falling between the initial address and the end address (col. 5 lines 10-21).
- 10. As to claim 18, Brantley, Jr. et al. taught that computing a local address comprised adding an offset of one or more bits to the global address, yielding the local address (fig. 7, 248).
- 11. As to claim 19, Brantley, Jr. et al. taught computing a local address comprised replacing more or more bits of the global address by a vase value, yielding the local address (fig. 7, 244, 246).
- 12. As to claim 20, Brantley, Jr. et al. taught that the propagating step comprised propagating the message to a number of processor elements, the number comprising less than all and more than one of the processor elements (fig. 1, col. 8 lines 35-69).
- As to claims 21-25, they do not teach or define above the invention claimed in claims 16-20 and are therefore rejected under Brantley, Jr. et al. for the same reasons set fourth in the rejection of claims 16-20, supra. As to claim 21's additional limitation of the local data memories of the first and second processing unit not on a common bus, as it clearly seen from figs. 1 and 2, local memory 30 of NODE 0 is not connected to a bus in common with local memory 30 of NODE n, but is instead connected through a network/storage interface unit 28 to a network 10 for communication between nodes as described in the text of the patent.
- 14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
- 15. A shortened statutory period for response to this action is set to expire 3 (three) months

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and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Richard Ellis whose telephone number is (703) 305-9690. The Examiner can normally be reached on Monday through Thursday from 7am to 5pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eddie Chan, can be reached on (703) 305-9712. The fax phone numbers for this Group are: After-final: (703) 746-7238; Official: (703) 746-7239; Non-Official/Draft: (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Richard Ellis June 27, 2002 ►Richard Ellis
Primary Examiner
Art Unit 2183